

## Federal Highway Administration, DOT

§ 655.409

### APPENDIX TO SUBPART F—ALTERNATE METHOD OF DETERMINING THE COLOR OF RETROREFLECTIVE SIGN MATERIALS

#### Subpart G—[Reserved]

AUTHORITY: 23 U.S.C. 101(a), 104, 105, 109(d), 114(a), 135, 217, 307, 315, and 402(a); 23 CFR 1.32; and 49 CFR 1.48(b).

#### Subparts A–C—[Reserved]

#### Subpart D—Traffic Surveillance and Control

SOURCE: 49 FR 8436, Mar. 7, 1984, unless otherwise noted.

##### § 655.401 Purpose.

The purpose of this regulation is to provide policies and procedures relating to Federal-aid requirements of traffic surveillance and control system projects.

##### § 655.403 Traffic surveillance and control systems.

(a) A traffic surveillance and control system is an array of human, institutional, hardware and software components designed to monitor and control traffic, and to manage transportation on streets and highways and thereby improve transportation performance, safety, and fuel efficiency.

(b) Systems may have various degrees of sophistication. Examples include, but are not limited to, the following systems: traffic signal control, freeway surveillance and control, and highway advisory radio, reversible lane control, tunnel and bridge control, adverse weather advisory, remote control of movable bridges, and priority lane control.

(c) Systems start-up is the process necessary to assure the surveillance and control project operates effectively. The start-up process is accomplished in a limited time period immediately after the system is functioning and consists of activities to achieve optimal performance. These activities include evaluation of the hardware, software and system performance on traffic; completion and updating of basic data needed to operate the system; and

any modifications or corrections needed to improve system performance.

##### § 655.405 Policy.

Implementation and efficient utilization of traffic surveillance and control systems are essential to optimize transportation systems efficiency, fuel conservation, safety, and environmental quality.

##### § 655.407 Eligibility.

Traffic surveillance and control system projects are an integral part of Federal-aid highway construction and all phases of these projects are eligible for funding with appropriate Federal-aid highway funds. The degree of sophistication of any system must be in scale with needs and with the availability of personnel and budget resources to operate and maintain the system.

##### § 655.409 Traffic engineering analysis.

Traffic surveillance and control system projects shall be based on a traffic engineering analysis. The analysis should be on a scale commensurate with the project scope. The basic elements of the analysis are:

(a) *Preliminary analysis.* The Preliminary Traffic Engineering Analysis should determine: The area to be controlled; transportation characteristics; objectives of the system; existing systems resources (including communications); existing personnel and budget resources for the maintenance and operation of the system.

(b) *Alternative systems analysis.* Alternative systems should be analyzed as applicable. For the alternatives considered, the analysis should encompass incremental initial costs; required maintenance and operating budget and personnel resources; and expected benefits. Improved use of existing resources, as applicable, should be considered also.

(c) *Procurement and system start-up analysis.* Procurement and system start-up methods should be considered in the analysis. Federal-aid laws, regulations, policies, and procedures provide considerable flexibility to accommodate the special needs of systems procurement.